Figure 0-5 Flow 2.2 NPAC SMS Disconnect Process
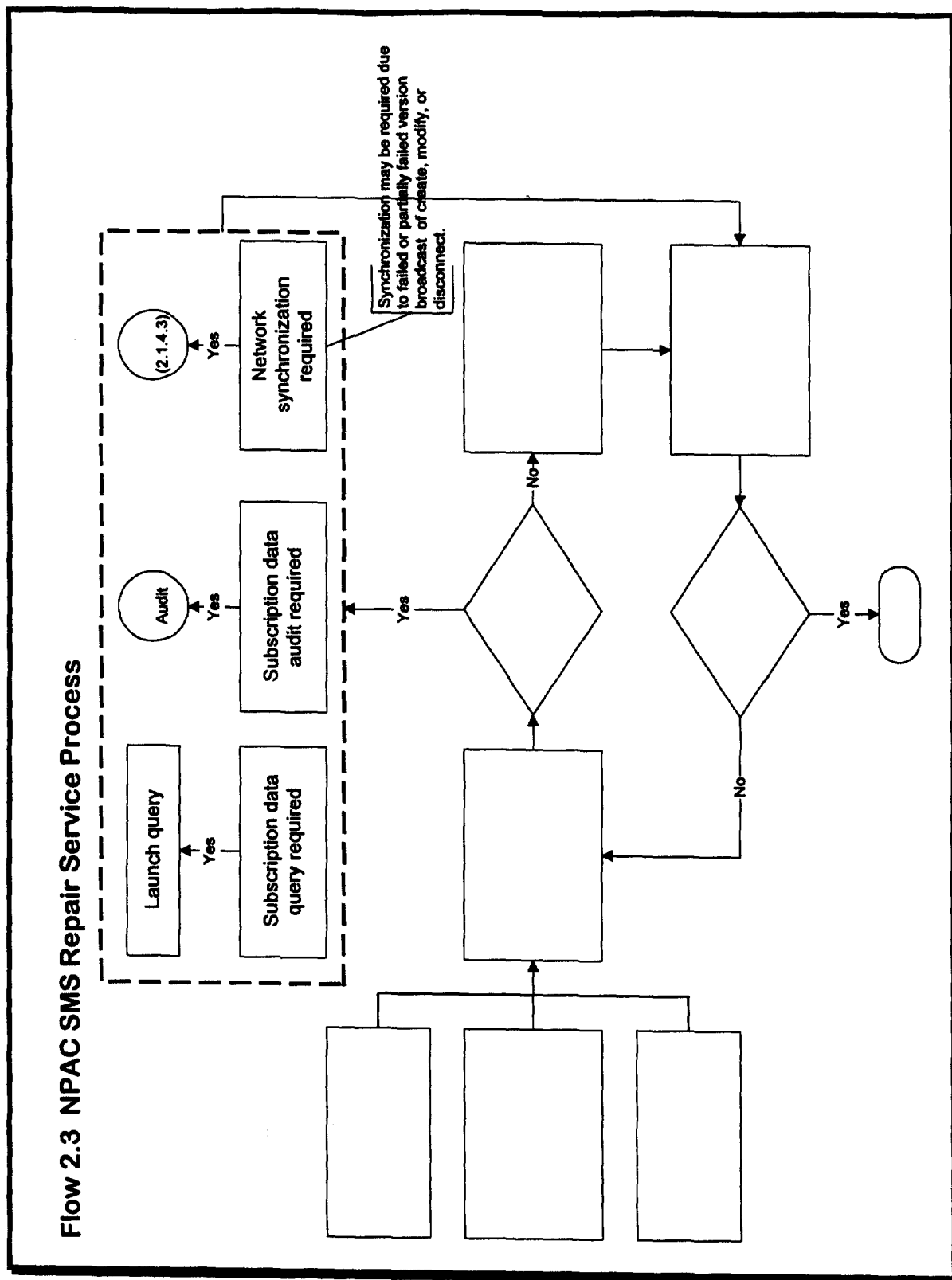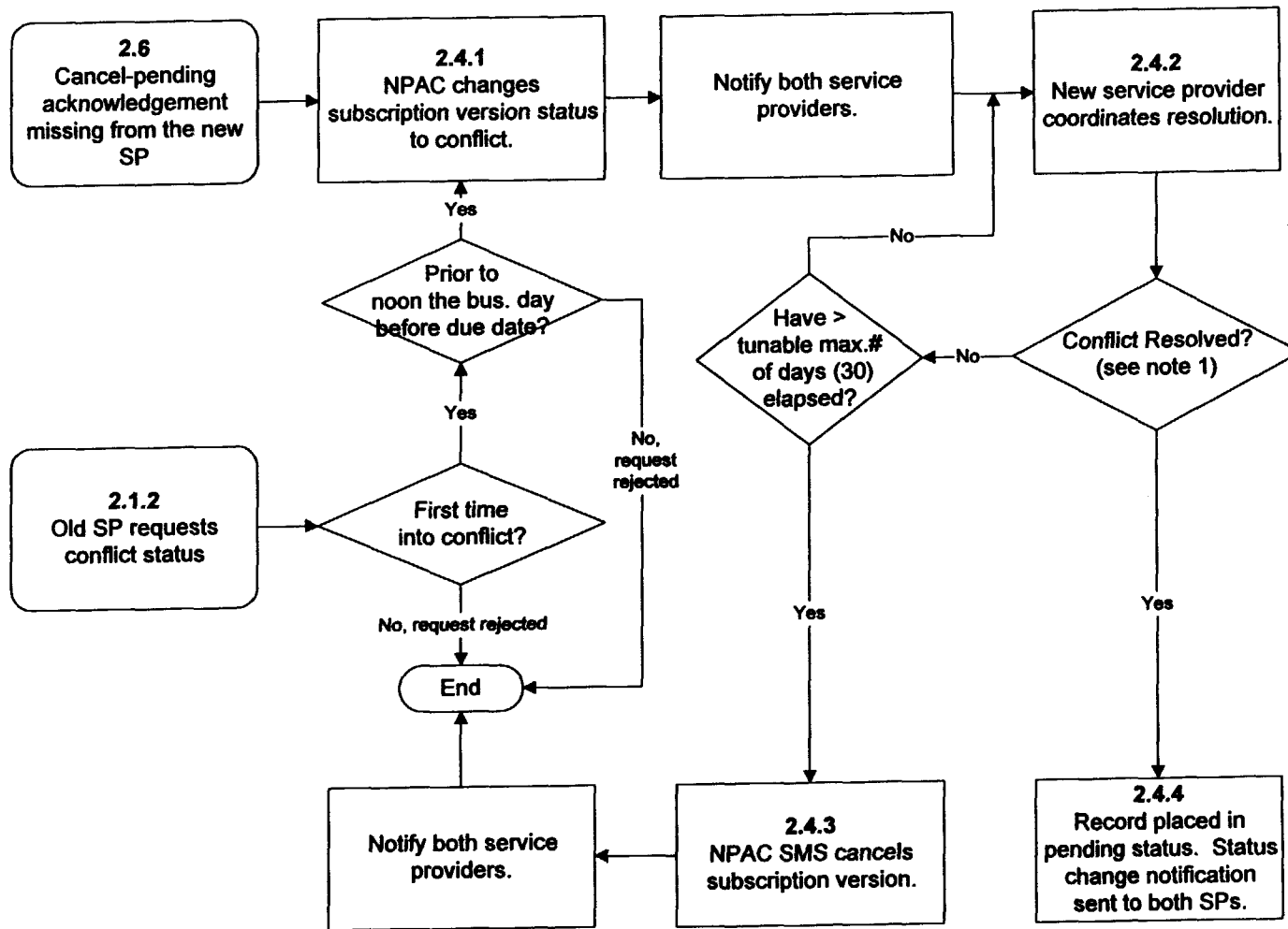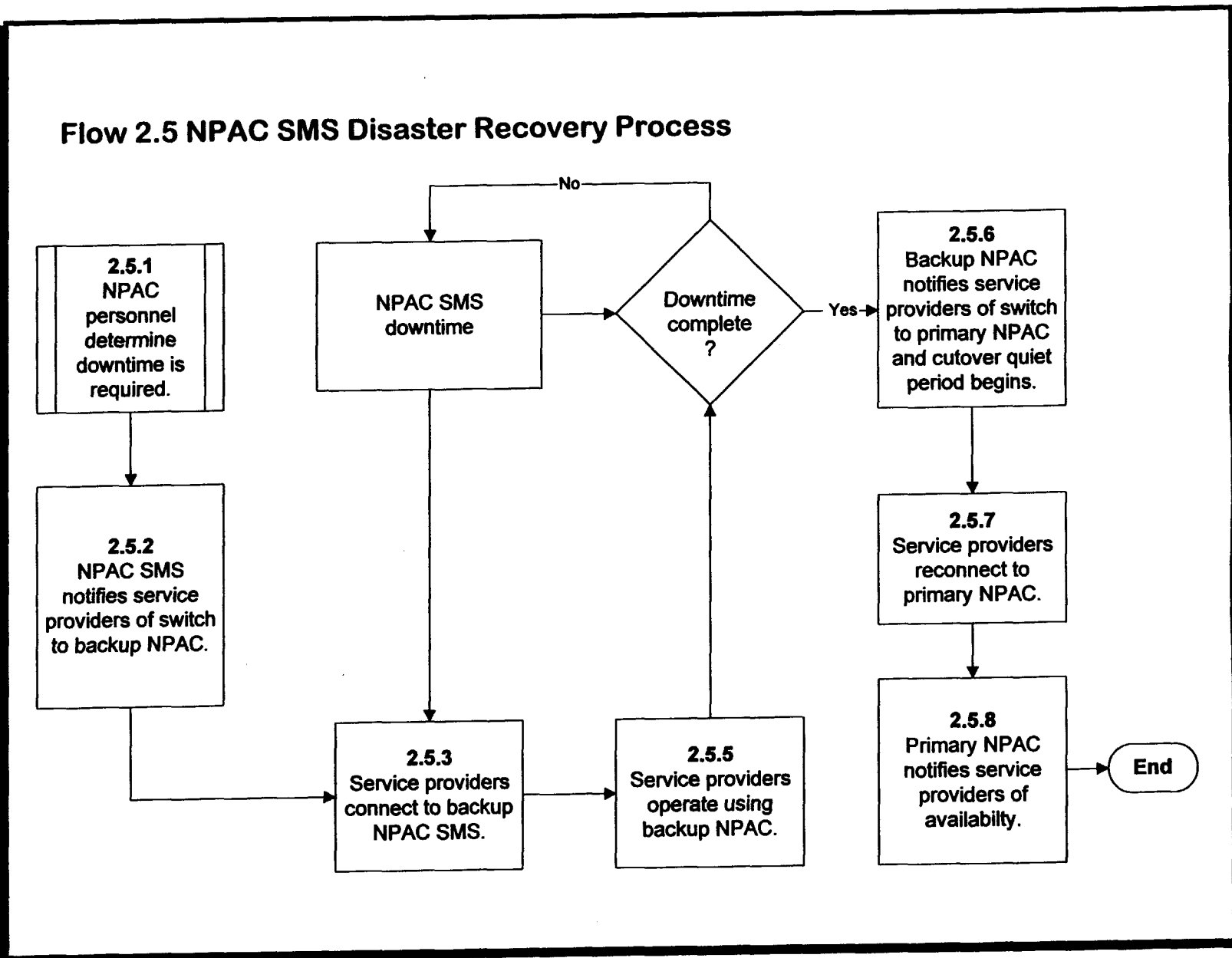
Flow 2.4 NPAC SMS Conflict Process

```
┌─────────────────┐      ┌──────────────────┐      ┌──────────────────┐      ┌──────────────────┐
│      2.6        │      │     2.4.1        │      │                  │      │     2.4.2        │
│ Cancel-pending  │      │  NPAC changes    │      │ Notify both      │      │ New service      │
│ acknowledgement │ ───▶ │ subscription     │ ───▶ │ service          │      │ provider         │
│ missing from    │      │ version status   │      │ providers.       │      │ coordinates      │
│ the new SP      │      │ to conflict.     │      │                  │      │ resolution.      │
└─────────────────┘      └──────────────────┘      └──────────────────┘      └──────────────────┘
```

Note 1: Within 6 hours, only old SP can initiate "conflict off." After 6 hours, either new or old SP can remove conflict.

Flow 2.5 NPAC SMS Disaster Recovery Process

2.5.1
NPAC personnel determine downtime is required.

2.5.2
NPAC SMS notifies service providers of switch to backup NPAC.

NPAC SMS downtime

Downtime complete ?

No

Yes→

2.5.6
Backup NPAC notifies service providers of switch to primary NPAC and cutover quiet period begins.

2.5.3
Service providers connect to backup NPAC SMS.

2.5.5
Service providers operate using backup NPAC.

2.5.7
Service providers reconnect to primary NPAC.

2.5.8
Primary NPAC notifies service providers of availabilty.

End

Figure 0-7 Flow 2.4.1 Conflict Process

Business Process Flow Diagrams

Figure 0-8 Flow 2.5 NPAC SMS Disaster Recovery Process

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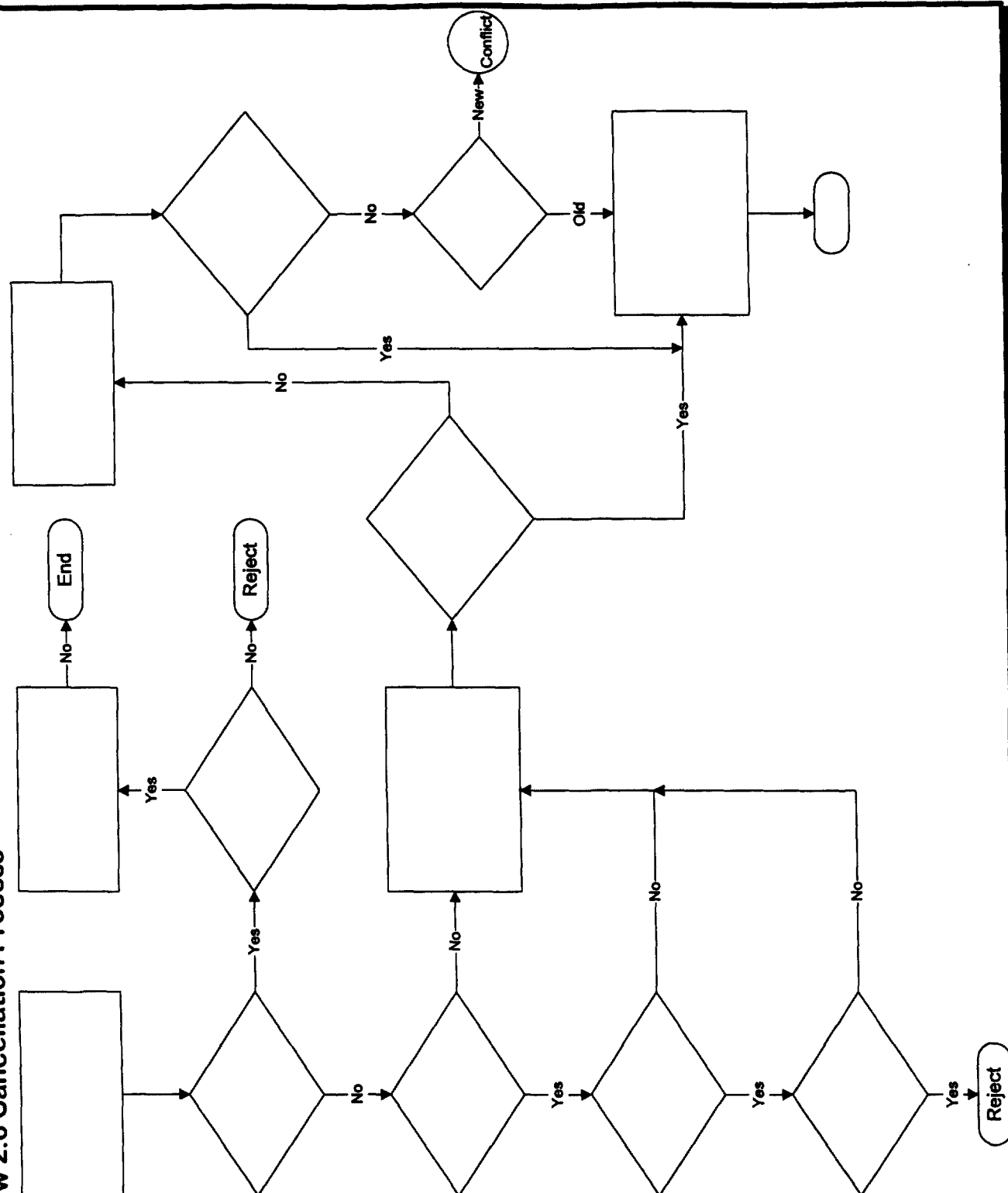
Figure 0-9 Flow 2.6 Cancellation Process

Flow 2.7 Audit Process

2.7.1
Service provider requests audit.

2.7.2
NPAC SMS issues queries to appropriate LSMSs.

2.7.3
NPAC SMS compares own SVs to LSMS SVs.

2.7.4
NPAC SMS updates appropriate LSMS DBs with SV updates.

All audits completed?

No

Yes

Report LSMS audit completion to requester.

End
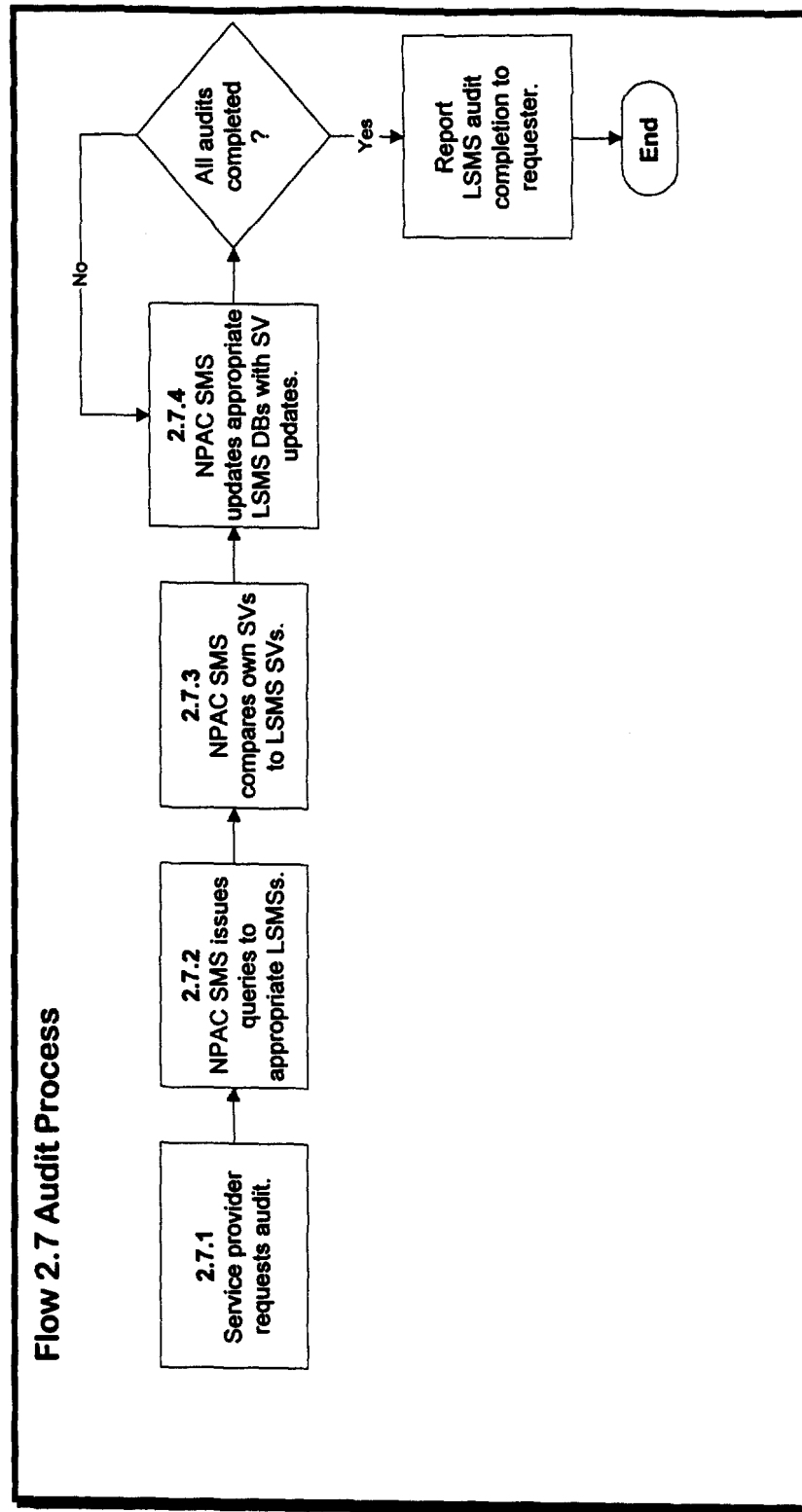
Figure 0-10 Flow 2.7 Audit Process
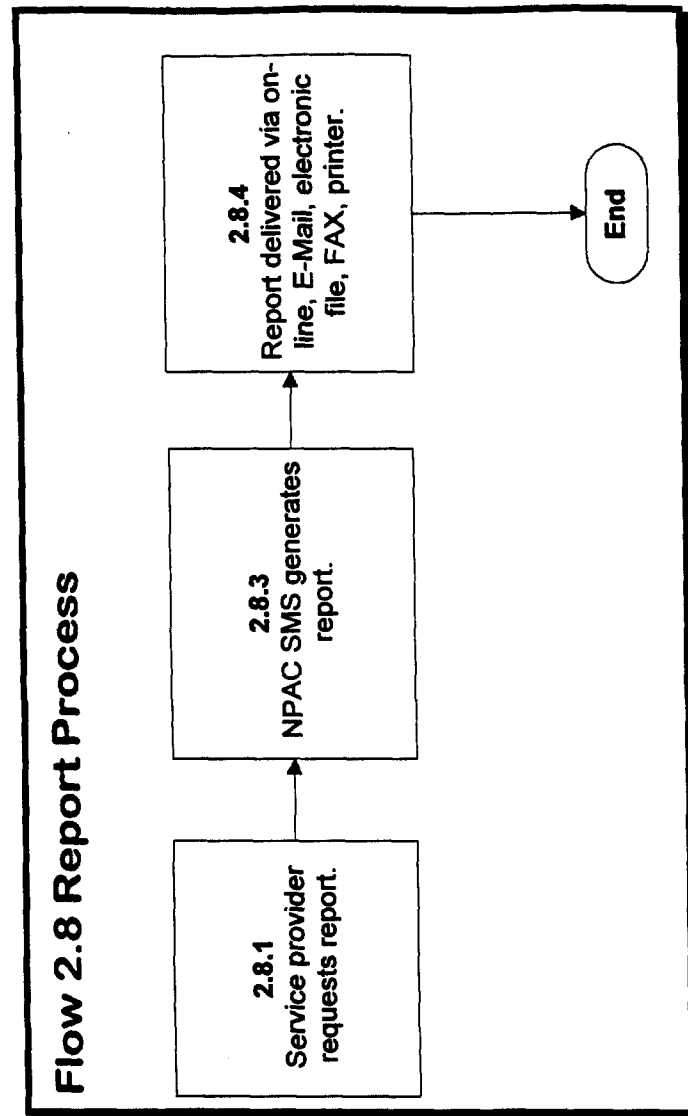
Figure 0-11 Flow 2.8 Report Process

Appendix B. Glossary

This glossary provides a comprehensive list of definitions and acronyms that apply to NPAC SMS.

CLASS	Custom Local Area Signaling Services. Premium local service features, such as call forwarding or automatic callback.
CMIP	Common Management Information Protocol
CMISE	Common Management Information Service Element
CNAM	Caller Id with Name
DPC	Destination Point Code
FR	Frame Relay
GDMO	Guideline for -Definitions of Managed Objects
GMT	Greenwich Mean Time
GTT	Global Title Translation
ICC	Illinois Commerce Commission
ISO	International Organization of Standardization
ISVM	Inter-Switch Voice Mail
LERG	Location Exchange Routing Guide
LIDB	Line Information Database
LNP	Local Number Portability
LRN	Location Routing Number. A routing number in the same form as a TN used to identify the TN's serving switch when the TN is a ported number.
LSMS	Local Service Management System
LISP	Local Intra-Service Provider Portability. Movement of end-user TN from one switch to another, but within the same Service Provider's Network.
LSPP	Local Service Provider Portability. Movement of end user TN from one Service Provider to another Service Provider.
MAC	Media Access Control
MD5	Message Digest (Version 5)
NANP	North American Numbering Plan. A 10-digit numbering scheme used in North America to uniquely identify a directory number.
NPA	An NPA code is the first three digits of the 10-digit destination number for all inter-NPA

	calls within the North America Numbering Plan Area.
NPAC Customer	Any customer of the NPAC SMS.
NPAC SMS	Number Portability Administration Center and Service Management System
NSAP	Network Layer Service Access Point
NXX	A code normally used as a central office code. It may also be used as an NPA code or special NPA code.
OCN	Operating Company Number
OSI	Open Systems Interconnect
PKCS	Public Key Crypto System
Ported TN	A TN ported to a switch that is not the NANP-assigned switch.
PPP	Point-To-Point Protocol
PSAP	Presentation Layer Service Access Point
RFP	Request for Proposal
RSA	A popular encryption algorithm whose name is derived from the initials of its inventors: Rivest, Shamir, and Adelman.
SCP	Service Control Point
SMS	Service Management System
SOA	Service Order Activation
SP	Service Provider. Generally refers to a facilities-based user of the NPAC SMS.
SSAP	Session Layer Service Access Point
SSN	Subsystem Number
TN	Telephone Number
TSAP	Transport Layer Service Access Point
Version	Time-sensitive or status-sensitive instance of a subscription.

Appendix C. System Tunables

This appendix provides a comprehensive list of tunables identified throughout the FRS and their default values.

SUBSCRIPTION TUNABLES				
Tunable Name	**Tunable Variable Name**	**Default Value**	**Units**	**Valid Range**
Initial Concurrence Window	SP_Initial_Concurrence_Window	18	business hours	1-72
The hours subsequent to the time the subscription version was initially created by which both Service Providers are expected to authorize transfer of service if this is an Inter-Service Provider port.				
Final Concurrence Window	SP_Final_Concurrence_Window	18	business hours	1-72
The number of hours after the concurrence request is sent by the NPAC SMS by which time both Service Providers are expected to authorize transfer of subscription service for an Inter-Service Provider port.				
Conflict Expiration Window	SV_Conflict_Cancellation_Window	30	calendar days	1-180
The length of time conflict subscriptions will remain in the conflict state before cancellation.				
Maximum Subscriber Query	Max_Subscriber_Query	50	records	10-150
The maximum number of active subscription versions returned by a query to the NPAC.				
Pending Subscription Retention	Pending_SV_Cancellation	90	calendar days	1-180
The length of time pending subscriptions will remain in the pending state before cancellation.				
Conflict Restriction Window	Conflict_Restriction_Window	12	HH:MM	00:00-24:00
The time on the business day prior to the New Service Provider due date that a Subscription version is no longer allowed to be set to conflict by the Old Service Provider.				
Conflict Resolution New Service Service Provider Restriction	New_SP_Conflict_Resolution_Restriction	6	business hours	1-72

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SUBSCRIPTION TUNABLES

Tunable Name	Tunable Variable Name	Default Value	Units	Valid Range
The number of business hours after the subscription version is put into conflict that the NPAC SMS will prevent it from being removed from conflict by the new Service Provider.				
Cancellation-Initial Concurrence Window	Cancellation_Initial_Ack_Window	9	business hours	1-72
The numbers of hours after the version is set to cancel pending by which both Service Providers are expected to acknowledge the pending cancellation.				
Cancellation-Final Concurrence Window	Cancellation_Final_Ack_Window	9	business hours	1-72
The number of hours after the second cancel pending notification is sent by which both Service Providers are expected to acknowledge the pending cancellation.				
Old Subscription Retention	Purge_Old_SV	18	calendar months	1-36
The length of time old subscriptions will be retained.				
Cancel-Pending Subscription Retention	Purge_Canceled_Pending_SV	90	calendar days	1-360
The length of time canceled subscriptions, with last status of pending, will be retained.				
Cancel-Conflict Subscription Retention	Purge_Canceled_Conflict_SV	30	calendar days	1-360
The length of time canceled subscriptions, with last status of conflict, will be retained.				
Cancel-Disconnect Pending Retention	Purge_Canceled_Disconnect_Pending_SV	90	calendar days	1-360
The length of time canceled subscriptions, with last status of disconnect pending, will be retained.				
Business Day Duration	Business_Day_Duration	12	calendar hours	1-24
The number of hours from the tunable business day start time.				
Business Day Start Time	Business_Day_Start	07:00 CST	hh:mm	00:00 - 24:00
The start of the business day in Central Standard Time.				

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Table 0-1 Subscription Tunables

COMMUNICATIONS TUNABLES				
Tunable Name	Tunable Variable Name	Default Value	Units	Valid Range
Subscription Activation Retry Attempts	Subscription_Version_Activation_Retry	3	attempts	1-10
The number of times a new subscription version will be sent to a Local SMS which has not acknowledged receipt of the activation request.				
Subscription Activation Retry Interval	Subscription_Version_Activation_Retry_Interval	2	minutes	1-60
The delay between sending new Subscription Versions to a Local SMS that has not acknowledged receipt of the activation request.				
Subscription Modification Retry Attempts	Subscription_Version_Modification_Retry	3	attempts	1-10
The number of times a modified active subscription version will be sent to a Local SMS which has not acknowledged receipt of the modification request.				
Subscription Modification Retry Interval	Subscription_Version_Modification_Retry_Interval	2	minutes	1-60
The delay between sending modified active subscription versions to a Local SMS that has not acknowledged receipt of the modification request.				
Subscription Disconnect Retry Attempts	Subscription_Version_Disconnect_Retry	3	attempts	1-10
The number of times the NPAC SMS will resend a subscription disconnect message to an unresponsive Local SMS.				
Subscription Disconnect Retry Interval	Subscription_Version_Disconnect_Retry_Interval	2	minutes	1-60
The amount of time that shall elapse between subscription disconnect retries.				
Local SMS Retry Attempts	LSMS_Retry_Attempts	3	attempts	1-10
The default number of times the NPAC SMS will resend a message to an unresponsive Local SMS.				

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	COMMUNICATIONS TUNABLES			
Tunable Name	**Tunable Variable Name**	**Default Value**	**Units**	**Valid Range**
Local SMS Retry Interval	LSMS_Retry_Interval	2	minutes	1-60
The default delay between sending messages to an unresponsive Local SMS.				
SOA Retry Attempts	SOA_Retry_Attempts	3	attempts	1-10
The default number of times the NPAC SMS will resend a message to an unresponsive SOA.				
SOA Retry Interval	SOA_Retry_Interval	2	minutes	1-60
The default delay between sending messages to an unresponsive SOA.				
Failed Login Attempts	Failed_Login_Attempts	3	attempts	0-10
The number of allowable incorrect logon attempts				
Failed Login Shutdown Period	Failed_Login_Shutdown_Period	60	seconds	0-300
The amount of time the NPAC SMS will wait to restart the logon process after a user has exceeded the Failed_Login_Attempts tunable.				
Unused User Id Disable Period	Unused_User_Id_Disable_Period	60	days	1-360
The number of days for which a userId has not been used before the NPAC SMS disables that userId.				
Password Age Limit	Password_Age_Limit	90	days	1-360
The amount of time for password aging.				
Password Expiration Notice	Password_Expiration_Notice	7	days	1-30
The amount of time prior to a password expiring that the NPAC SMS will notify a user.				
Post Expiration Logins	Post_Expiration_Logins	2	logins	0-10
The number of logins a user is permitted after the user's password has expired.				
Password Reuse Limit	Password_Reuse_Limit	6	months	1-36
The amount of time in which a password cannot be reused.				

COMMUNICATIONS TUNABLES				
Tunable Name	**Tunable Variable Name**	**Default Value**	**Units**	**Valid Range**
Record Logons After Failure	Record_Logons_After_Failure	10	attempts	0-100
The threshold for consecutive failed logon attempts after which logon attempts will be recorded in the audit log.				
Non-Use Disconnect	Non_Use_Disconnect	60	minutes	1-1440
The amount of idle (non-use) time before the NPAC SMS will disconnect a user's logon session.				
Maximum Number of Download Records	Maximum_Number_Download_Records	10000	records	1-200000
The maximum number of records for a single data download.				
Maximum Download Duration	Maximum_Download_Duration	60	minutes	1-1440
The maximum time range allowed for a data download.				

Table 0-2 Communications Tunables

AUDIT TUNABLES				
Tunable Name	**Tunable Variable Name**	**Default Value**	**Units**	**Valid Range**
Canceled Audit Retention Period	Canceled_Audit_Retention_Period	30	days	1-360
The length of time canceled audits will be retained.				
Data Integrity Sample Size	Data_Integrity_Sample_Size	1000	SVs	1-5000
The number of active Subscription Versions in a sample to be monitored by the NPAC SMS.				
Data Integrity Sample Frequency	Data_Integrity_Sample _Frequency	7	Days	1-90
The interval in days between Data Integrity Samples conducted by the NPAC SMS.				

AUDIT TUNABLES				
Tunable Name	**Tunable Variable Name**	**Default Value**	**Units**	**Valid Range**
Subscription Query Record Limit	Subscription_Query_Record_Limit	50	Subscriptions	1-5000
The maximum number of records that can be returned from a query.				

Table 0-3 Audit Tunables

LOGS TUNABLES				
Tunable Name	**Tunable Variable Name**	**Default Value**	**Units**	**Valid Range**
Local SMS Activation Log Retention Period	Local_SMS_Activation_Log_Duration	90	days	1-360
The number of days Local SMS activation responses will remain in the log.				
Audit Log Retention Period	Audit_Log_Retention_Period	90	days	1-360
The length of time audit logs will be retained.				
Error Log Retention Period	Error_Log_Retention_Period	90	days	1-360
The length of time system error logs will be retained.				
History File Data Storage	History_File_Data_Storage	365	days	1-365
The length of time history logs will be retained.				
Usage Log Retention	Usage_Log_Retention	90	days	1-360
The length of time usage logs will be retained.				

Table 0-4 Logs Tunables

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KEYS TUNABLES				
Tunable Name	**Tunable Variable Name**	**Default Value**	**Units**	**Valid Range**
Key Change Interval	Key_Change_Interval	7	days	1-365
How often the key is changed automatically.				

Table 0-5 Keys Tunables

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